

REMARKS

Claims 64-70 and 72-101 were pending in the application. Claims 65, 81, 87, 89, 90, 94, and 99 have been amended. Therefore, claims 64-70 and 72-101 remain pending in this application.

Support for the amendments to the claims and newly added claims can be found throughout the application, including, but not limited to, the following figures and locations: p. 2, lines 6-7; p. 2, line 29 to p. 3, line 3; and p. 3, lines 17-22.

Examiner Interview

Applicant's undersigned representative thanks the Examiner for the telephone interview held on December 7, 2010. During the interview, the § 101 and § 112 rejections were discussed. An agreement to withdraw these rejections was reached, based on the amendments presented herein.

Rejections Under Section 101

Claims 87-91 stand rejected under 35 U.S.C. § 101. Office Action at 4. Applicant has amended the claims to advance prosecution of the case, but also respectfully disagrees with these rejections, as discussed below.

The Examiner asserts that the previous version of claim 87 is “directed to non-statutory subject matter, [a] program per se.” *See id.* In fact, that claim 87 was directed to “a method” comprising several steps that are performed by “a program running on at least one processor of a computer.” The Examiner thus apparently takes the position that it is forbidden under § 101 to recite “limitations” that include “a program performing tasks of a method.” *See id.* Applicant disagrees, and respectfully submits that there is no prohibition on a method claim including actions performed by a “program running on at least one processor of a computer.” Indeed, the Examiner does not cite authority for the assertion that such limitations render a claim non-statutory. *See* Office Action at 4. Applicant respectfully notes that recent guidance from the Patent Office states that

Examiners should continue to examine patent applications for compliance with section 101 using the existing guidance concerning the machine-or-transformation test as a tool for determining whether the claimed invention is a process under section 101. If a claimed method meets the machine-or-transformation test, the method is likely patent-eligible under section 101 unless there is a clear indication that the method is directed to an abstract idea. (Emphasis added.)

*See Memorandum Re: Supreme Court Decision in *Bilski v. Kappos* dated June 28, 2010, from Robert Bahr, Acting Associate Commissioner For Patent Examination Policy (available at http://www.uspto.gov/patents/law/exam/bilski_guidance_28jun2010.pdf) ("Memo of June 28"). Claim 87 recited (and still recites) "at least one processor of a computer," and thus met the "machine-or-transformation test" because that claim "is tied to a particular machine or apparatus." See *Bilski v. Kappos*, 561 U.S. __ (2010), *slip. op.* at 6, citing *In re Bilski*, 545 F. 3d 943, 954 (Fed. Cir. 2008) (en banc). Applicant further asserts that neither the previous nor current version of claim 87 is "directed to an abstract idea," and thus both the previous and current versions represent patentable subject matter under § 101. See Memo of June 28.*

Although Applicant disagrees with the Examiner's rejections of claims 87-91 for at least the reasons above, Applicant has amended claims 87, 89, and 90 to advance prosecution of the case as agreed upon in the interview. Applicant therefore respectfully requests withdrawal of the § 101 rejections of claim 87 and its dependent claims 88-91.

Applicant further notes that independent claim 81 has been amended to recite a "computer-readable storage medium" (emphasis added). Applicant submits that the scope of claim 81 does not include "transitory propagating signals *per se*," and thus represents patentable subject matter under 35 U.S.C. § 101 according to recent guidance from the Patent Office. *See Memorandum on Subject Matter Eligibility of Computer Readable Media*, Jan. 26, 2010 (available at http://www.uspto.gov/patents/law/notices/101_crm_20100127.pdf).

Rejections Under Section 112, Second Paragraph

Claims 65, 90, 94, and 99 stand rejected under 35 U.S.C. § 112, second paragraph, on the basis that "the term 'suitable' renders the claim[s] indefinite." *See* Office Action at 4. As discussed in the interview, Applicant has amended these claims in order to advance prosecution of the case (but without conceding to the propriety of these rejections). Claim 65 now recites, for example, "modify[ing] data in the received one or more digital data packets to a data format accepted by the emulator" (emphasis added). Similar amendments have been made to claims 90, 94, and 99. Applicant thus respectfully requests withdrawal of the § 112, second paragraph rejections of claims 65, 90, 94, and 99.

Claim 87 stands rejected under 35 U.S.C. § 112, second paragraph, on the basis that "the phrases 'the program storing,' 'the program retrieving,' and the 'program transmitting' render the

claim indefinite because it is unclear how a program can perform a task by itself.” Office Action at 4. The Examiner rejects claim 89 for similar reasons. *See id.* at 4-5. Although Applicant respectfully disagrees with these rejections of claims 87 and 89, Applicant has amended the claims as agreed upon by the Examiner in the interview to advance prosecution of the case. Applicant therefore respectfully requests withdrawal of the § 112, second paragraph rejections of claims 87-91.

Rejections Under Section 103

All independent claims (64, 73, 81, 87, 92, 97) stand rejected under 35 U.S.C. 103(a) as being unpatentable over Evans *et al.* (U.S. Pat. No. 6,279,146) in view of Gagne *et al.* (U.S. Patent No. 5,303,347). Office Action at 5-12. Applicant respectfully traverses these rejections.

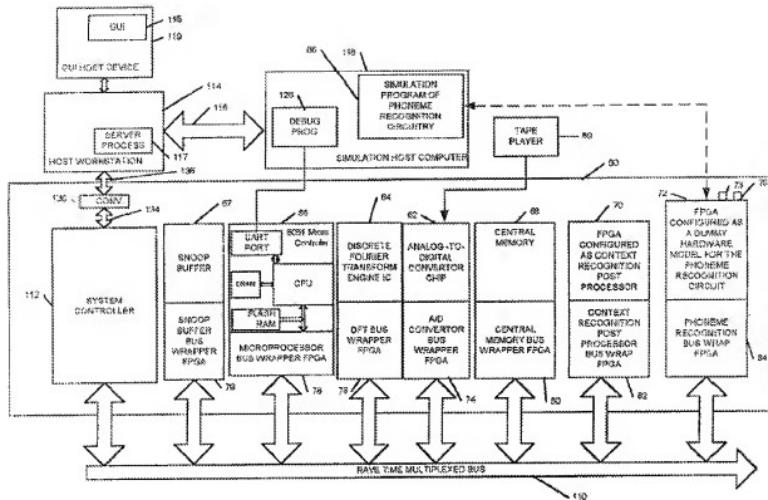
Claims 64, 73, and 81

Applicant respectfully submits that the proposed combination of Evans and Gagne, even assuming *arguendo* a motivation to combine these references (which Applicant does not concede), fails to teach each and every element of claim 64.

The Examiner summarizes the Evans reference as follows:

Evans teaches a method for verifying a multi-component electronic design in which one component runs at a speed slower than the rest of the components by implementing higher speed components on an emulator board [60] and simulating the slow speed component on a computer [118], wherein the simulation computer [118] and emulator board [60] are connected via a host computer [114] wherein the circuit emulator [60] is configured to emulate an integrated circuit that is designed to communicate bidirectionally with a simulated component on a computer [118].

See Office Action at 3 and Evans at Fig. 2 (reproduced below):



Evans's Figure 2

Evans, according to the Examiner, therefore “teaches a computer [114 that] is used to receive data at a higher speed source, the emulator [60], to send [the data] to a slower speed sink, a computer [118].” See Office Action at 3. In comparing Evans to claim 64, the Examiner thus appears to make the following arguments:

(1) Evans’s “host workstation 114” teaches claim 64’s “computer system.”

(2) Evans’s “emulator 60” teaches claim 64’s “emulator [that] is configured to emulate an integrated circuit designed to communicate bidirectionally with a computer peripheral device.”

(3) Evans’s “simulation host computer 118” teaches claim 64’s “computer peripheral device.”

See id.

Claim 64 recites a “computer system” “receiv[ing] one or more digital data packets at a first transmission rate from the computer peripheral device,” and the computer system “send[ing] data contained in the received digital data packets to the emulator at a second transmission rate over a computer peripheral interface coupled to the computer system, wherein the second transmission rate is slower than the first transmission rate” (emphasis added). These elements are admittedly

not explicitly taught by Evans, as the Examiner freely concedes that in Evans, “the first transmission rate is slower than the second transmission rate” (emphasis added). Office Action at 6. The above admission by the Examiner is in direct contradiction to what is recited in claim 64. The Examiner theorizes, however, that if Evans were to somehow work differently than it does in its actual configuration (e.g., “in the case that [Evan’s] emulator’s speed is now slower than [a] peripheral device”), then Evans (in combination with Gagne) would teach or suggest each and every element of claim 64. *See* Office Action at 7 (emphasis added). Applicant respectfully submits that the Examiner’s above-described theory is mere conjecture, and goes beyond and *against* the actual teachings of the cited art.

Applicant further submits that the Examiner’s proposed modification of Evans would change the nature of that reference’s operation and/or render that reference unsuitable for its intended purpose. The “simulation program of phoneme recognition circuitry [86]” of Evans is characterized by the Examiner as a “slower speed sink.” *See* Office Action at 6-7 and Evans at Fig. 2. Evans teaches that “simulation program 86 communicates with the verification engine implementation of the rest of the target system 10 by way of a dummy hardware module 72,” and that during communication, “system controller 112 [a portion of verification engine 60] freezes the operation of [bus 110] until it receives a response from the simulation host computer 118, which it relays to dummy hardware model 72.” *See* Evans at col. 9, lines 17-59. Evans notes that “although the time necessary to make these updates does slow system operation, it is a fairly small time demand compared with the much longer time necessary for simulation program 86 to execute and to send data to and receive data from the host work station 114.” *Id.* at lines 63-67 (emphasis added). Evans thus appears to specifically teach that certain hardware components (including system controller 112 and bus 110) are designed to operate in a manner that accommodates the “much longer time necessary for simulation program 86 to execute and to send . . . and receive data.” *See id.* Applicant therefore respectfully submits that “us[ing] the same system connection[s] to implement communication in the case that the emulator’s speed is now slower than the peripheral device” as suggested by the Examiner, Office Action at 7, would be improper in view of the abovementioned features of the Evans reference, as it would change the nature of Evans’s hardware structures and/or render them unsuitable for their intended purpose.

Applicant submits that for at least the reasons above, the Evans reference thus fails to teach or suggest the above-mentioned elements of claim 64. Gagne is not alleged to teach or suggest these elements, *see* Office Action at 5-7, and Applicant submits that the Examiner has therefore failed to demonstrate that the proposed combination of Evans and Gagne makes a *prima facie* case of obviousness against claim 64. Applicant respectfully requests withdrawal of the § 103 rejections of claim 64 and its dependent claims. Additionally, though claims 73 and 81 differ in scope from claim 64, Applicant also requests withdrawal of the § 103 rejections of claim 73, 81, and their respective dependent claims for at least similar reasons to those argued above.

Claims 87, 92, and 97

For at least reasons related to those argued above with respect to claim 64, Applicant respectfully submits that the proposed combination of Evans and Gagne (again assuming *arguendo* a motivation to combine these references exists, which Applicant does not concede) fails to teach each and every element of claim 87. Claim 87 recites (in part) “receiving digital data from a circuit emulator at a program running on at least one processor of a computer, wherein the digital data is received at a first transmission rate, and wherein the circuit emulator is configured to emulate an integrated circuit that is designed to communicate bidirectionally with a computer peripheral device,” and “the program transmitting the retrieved data to the computer peripheral device at a second transmission rate over a computer peripheral interface coupled to the computer, wherein the first transmission rate is slower than the second transmission rate” (emphasis added). As discussed above, the Examiner admits that the above-emphasized claim elements are not taught by the Evans reference, which actually teaches the opposite. *See, e.g.*, Office Action at 6-7 and 10-11. Applicant thus respectfully reiterates that the Examiner makes assumptions beyond the teachings of the art in his present rejection and respectfully submits that the proposed combination of Evans and Gagne fails to teach or suggest each and every one of the elements of claim 87. Applicant thus respectfully requests withdrawal of the § 103 rejections of claim 87 and its dependent claims. Further, though claims 92 and 97 differ in scope from claim 87, Applicant also requests withdrawal of the § 103 rejections of claim 92, 97, and their respective dependent claims for at least similar reasons to those argued above.

CONCLUSION

In light of the foregoing amendments and remarks, Applicant submits that all pending claims are now in condition for allowance, and an early notice to that effect is earnestly solicited.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant hereby petitions for such extensions. No fees are believed due as a result of the present amendments, but if any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505\6057-16302.

Respectfully submitted,

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